State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Rd.
San Diego, CA 92123
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

September 17, 2020

Kevin Hadden
Orange County Sanitation District
10844 Ellis Avenue
Fountain Valley, CA 92708

Dear Mr. Hadden:

Bay Bridge Pump Station and Force Mains Replacement Project (PROJECT)
RECIRCULATED ENVIRONMENTAL IMPACT REPORT (REIR)
SCH# 2016111031

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a REIR from Orange County Sanitation District (OCSD) for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1] CDFW previously submitted comments in response to the Notice of Availability of a Draft Recirculated EIR.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on Projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 *et seq*.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 *et seq*.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: Orange County Sanitation District (OCSD)

Objective: The objective of the Project is to replace the existing Bay Bridge Pump Station and associated force mains to bring the pump station facility and force mains to current design and reliability standards. The proposed Project involves demolishing the existing pump station building and constructing new pump station facilities including a pump station, generator, and odor control facilities within and adjacent to the existing facility. The Project will abandon existing force mains and install new force mains across the Newport Bay Channel south of Bay Bridge.
The draft EIR which analyzed the original Project; (Michael Baker International 2017) was not certified due to conflicts with the planned development of the Back Bay Landing Project. Following negotiations and consideration of site plan alternatives, the *Bay Bridge Pump Station and Force Mains Replacement Project Draft Recirculated Environmental Impact Report* (2019) analyzed three conceptual site plans. In response to comments received during the public review period for the 2019 document, OCSD selected one conceptual site plan and one construction method to analyze in the 2020 Recirculated EIR. The concept originally labeled the, "South Pump Station" has been renamed the, "Adjacent Pump Station" and is the proposed Project analyzed in the 2020 REIR.

[1] CEQA is codified in the California Public Resources Code in section 21000 *et seq*. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Per the REIR, development of the Adjacent Pump Station would involve expanding the existing pump station facility site approximately 100 feet to the west, constructing a new pump station building, and installing force main improvements across the Newport Bay Channel south of Bay Bridge. The Adjacent Pump Station would connect to the existing OCSD force main system to the west by installing 1,500 LF of dual force mains (up to 32" in diameter) across the Newport Bay Channel south of Bay Bridge. The REIR indicates that the Project will either microtunnel or open trench cut under East Coast Highway toward the southside of the bridge, where the Project as proposed will then open trench dredge under Newport Bay Channel to install the force mains.

Location: The Project is located within the southwestern portion of the City of Newport Beach, within the County of Orange, California. The Project site is located at 300 East Coast Highway and is developed with an OCSD sewer pump station, associated improvements, and a recreational vehicle storage area. The Project site also includes sewer force main improvements that extend from the existing pump station westerly beneath the Newport Bay Channel (south of Bay Bridge) to connect an existing OCSD force main system and pipeline on the west side of Bay Bridge.

Biological Setting: Pump station improvements and portions of the force main improvements outside of the Newport Bay Channel would occur primarily in developed paved areas or areas with ornamental landscaping. No special-status plant species have been observed at the Project site due to the developed nature of the terrestrial portions of the Project site and lack of suitable habitat. An on-site terrestrial survey conducted on March 18, 2019 detected 18 common terrestrial wildlife species. No special-status wildlife species were observed on site.

The Project site contains suitable habitat to support a variety of nesting bird species. The Marine Resources Study Table 1 presented in the REIR identifies multiple sensitive bird species with the potential to occur in the Project area, including California brown pelican (*Pelecanus occidentalis californicus*; CDFW Fully Protected Species), osprey (*Pandion haliaetus*; CDFW Watch List), American peregrine falcon (*Falco peregrinus anatum*; CDFW Fully Protected Species), California least tern (*Sterna antillarum browni*; California Endangered Species Act (CESA)-listed Endangered and Endangered Species Act (ESA)-listed Endangered, CDFW Fully Protected Species), and light-footed ridgway's rail (*Rallus obsoletus levipes*; CESA-listed Endangered and ESA-listed Endangered, CDFW Fully Protected Species).

Upper and Lower Newport Bay is an estuary and supports not only extensive eelgrass beds, but also rare coastal lagoon habitats and wetlands; these wetland habitats are found within the Upper Newport Bay State Marine Conservation Area (SMCA) which are protected under the State Marine Life Protection Act. SMCAs protect tidal lands, wetlands up to the mean high tide line, fish and fish habitat for many fish species that are both state and federally managed from the bay bridge to the San Diego Creek Channel. The Project area is surrounded by sensitive areas to the north and south of the highway bridge including eelgrass beds (*Zostera marina* and/or *Zostera pacifica*) and shallow estuarine waters/wetland, which are essential foraging habitats for multiple species. Green sea turtles (*Chelonia mydas;* ESA-listed threatened) may be found foraging in this area and southern steelhead (*Oncorhynchus mykiss*; ESA-listed endangered) may be found during migration periods (calfish.ucdavis.edu, 2019).

As outlined in CDFW's comment letter on the Availability of a DREIR (2019), our continued recommendation is to select a force main alignment that is located outside of the upper Newport Bay SMCA, and CDFW thanks OCSD for selecting a conceptual site plan which follows this recommendation. CDFW also advocated for the use of microtunneling and/or horizontal directional drilling (HDD) in our 2019 comments.

Timeframe: Microtunneling is anticipated and assumed in the 2020 REIR to occur 24 hours per day and would take approximately two months to microtunnel across East Coast Highway. Dredging and trenching activities across Newport Bay Channel would take approximately four months. Force main improvements are anticipated to take approximately six months.

COMMENTS AND RECOMMENDATIONS
CDFW offers the comments and recommendations below to assist OCSD in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

I. Project Description and Related Impact Shortcoming

COMMENT #1: Force Main Improvement Method Selection

Section 3.4, Page 3-13 and Section 5.3.4, Page 5.3-13

Issue: The Project as proposed involves dredging and trenching across the Newport Bay Channel to install force mains between the new pump station and existing OCSD conveyance system. CDFW does not support dredging within the Newport Bay Channel and continues to recommend utilization of microtunneling or horizontal directional drilling (HDD) technologies to avoid impacts to eelgrass, wetlands, fish, birds, benthic habitat, and invertebrates.

Specific impact: Dredging would involve direct removal of eelgrass habitat and marine invertebrates, and habitat modification within the Newport Bay Channel. The REIR describes dredging as, "[p]lacement of a dredge (boat) with a submersible pump to suction out sediments at the bottom of the Newport Bay Channel (page 3-12)." The REIR goes on to state, "Dredging to install the force main improvements would require trenching approximately 580 feet long by 10 feet wide by 18 feet deep across the Newport Bay Channel, draining the trench, shoring of the trench walls, and possibly cofferdams within Newport Bay Channel. Accordingly, dredging would result in disturbance to the Newport Bay Channel within the immediate vicinity of the dredged area. Potential biological resource impacts associated with dredging may include construction-related turbidity, light and noise, and increased workboat activity."

Why impact would occur: In addition to direct removal of eelgrass habitat and marine invertebrates, dredging can result in underwater noise, causing behavioral responses such as interruption of species movements between Lower Newport and Upper Newport Bay. Dredging may also result in turbidity and sedimentation that could be carried by currents into the SMCA resulting in indirect impacts. This may lead to poor water quality and indirect impacts to birds, marine plants, fish, animals, and marine habitats.

Evidence impact would be significant: In alignment with our 2019 comments, CDFW is concerned about potential impacts to the SMCA, as well as potential impacts to eelgrass due to its historical presence throughout Upper and Lower Newport Bay. Eelgrass habitat areas are designated Habitat Areas of Particular Concern (HAPC) under the federal Magnuson-Stevens Fishery Conservation and Management Act, the primary law governing marine fisheries management in U.S. waters. The National Marine Fisheries Service, in collaboration with CDFW and other agencies, developed a statewide California eelgrass mitigation policy (CEMP, 2014) that incorporates a "no net loss of habitat" to help conserve eelgrass resources in California. Eelgrass habitat is present within the project area and would likely be impacted by dredging. Additionally, the importance of eelgrass protection and restoration, as well as the ecological benefits of eelgrass is identified in the California Public Resources Code (PRC Section 35630).

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Project Description and Related Impact Shortcoming)

Mitigation Measure #1 and #2: "Adjacent Pump Station with Microtunneling" Alternative Selection and Associated Mitigation

To minimize significant impacts: CDFW recommends the use of microtunneling or HDD rather than dredging to install force main improvements across the Newport Bay Channel, as well as incorporation of a mitigation measure to address associated impacts.

The REIR analyzes multiple Project Alternatives, including the, "Adjacent Pump Station with Microtunneling" Alternative (Alternative) examined in Section 7.2. As described in the REIR, the only difference between the proposed Project and this alternative is that installation of the force main improvements across Newport Bay Channel would be executed via microtunneling rather than dredging with the Alternative. The REIR describes microtunneling as, "[a] remote-controlled, continuously supported pipe jacking method. Microtunneling operations are managed by an operator in an above ground control container alongside of the shaft. Soil excavation takes place by way of infusing the soil with slurry at the face of the bore and cuttings are forced into slurry inlet holes in the Microtunneling Bore Machines crushing cone for circulation to and from a separation plant through a closed system. Areas where the pipe is microtunneled may require a casing pipe as large as 72 inches in diameter, which has been evaluated throughout this EIR as a worst-case scenario (page 3-12)."

CDFW concurs with the biological analysis provided in Section 7.2 of the REIR, concluding that the microtunneling Alternative would reduce the Project's impacts on marine wildlife species and thus is environmentally superior to the proposed Project. Although trenchless technologies such as microtunneling and HDD create fewer impacts than traditional dredging, associated impacts from potential hydrofractures would still be considered significant. As indicated in our 2019 letter and reiterated in the REIR, microtunneling could result in potential hydrofractures, or "frac-outs" when

utilizing clay lubricants (i.e., bentonite slurry), which could adversely impact benthic invertebrates, aquatic plants, fish, and their eggs if bentonite is discharged into waterways on accident.

In addition to selection of the "Adjacent Pump Station with Microtunneling" Alternative described above, CDFW recommends incorporating the below language into a mitigation measure:

"*To minimize significant impacts associated with microtunneling:*

a. *drilling shall halt immediately when a hydrofracture is detected, and hydrofractures shall be cleaned immediately after they occur, if feasible. Necessary response equipment shall be readily accessible and in good working order;*
b. *borehole pressures should be monitored during gall drilling, boring, and reaming activities. The monitor should be independent of and work closely with the drill operator during operations. The drill operator and/or monitors shall have the authority to halt HDD without reprisal;*
c. *all field personnel shall understand their responsibility for timely reporting of hydrofractures; and,*
d. *techniques to reduce potential for hydrofracture and inadvertent returns such as:*

    i. *sufficient earth cover for the given substrate should be used to increase resistance to hydrofracture;*
    ii. *an adequately dense drilling fluid should be used to avoid travel of drilling fluid in porous sands;*
    iii. *the bore should be conducted in a manner that avoids collapse;*
    iv. *borehole pressure should be maintained low enough to avoid hydrofracture;*
    v. *reaming and pullback rates should be maintained at rates slow enough to avoid over-pressurization of the bore;*
    vi. *the surface above the vicinity of the drill head should be visually monitored for surface evidence of hydrofracture;*
    vii. *drilling methods should be modified to suit site conditions such that hydrofracture does not occur; and,*
    viii. *Non-toxic dyes or markers should be utilized to aid hydrofracture detection."*

COMMENT #2: Notification for Channel Impacts

Issue: The Project does not suitably address notification for impacts to the bed and bank of Newport Bay Channel, per Fish & G. Code, section 1600 *et seq*.

Specific impact: Dredging and trenching as described involves direct impacts to the bed and bank of Newport Bay Channel. If microtunneling is adopted in lieu of traditional trenching technologies, per CDFW recommendation, then accidental frac-outs could possibly warrant notification (see Comment 1).

Why impact would occur: The REIR addresses the need for notification in terms of jurisdictional wetlands for the proposed Project stating that, "All proposed improvements have been designed to remain outside of the top of active banks and the canopy/drip line of any associated riparian vegetation, whichever is greater. Therefore, a Streambed Alteration Agreement (SAA) from CDFW is not required for the proposed project (page 5.3-10)." However, CDFW does not regulate wetlands. Instead, CDFW regulates the bed, bank, and channel of the stream.

Evidence impact would be significant: Fish & G. Code, section 1600 *et seq*. requires any person, state or local government agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following: divert or obstruct the natural flow of any river, stream, or lake; or deposit or dispose of material into any river, stream, or lake.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Project Description and Related Impact Shortcoming)

Mitigation Measure #3: Notification for Channel Impacts

To minimize significant impacts: While CDFW acknowledges that it is the responsibility of the Applicant and the Lead Agency under CEQA (e.g., OCSD) to ascertain as to whether the Project activities described in the REIR are subject to wetland permitting requirements, we strongly recommend that OCSD notify for impacts to Newport Bay Channel under Fish & G. Code, section 1600 *et seq*.

CDFW also recommends incorporating the below language into a mitigation measure:

"OCSD will notify for impacts to Newport Bay Channel per Fish & G. Code, section 1600 et seq. All wetland permitting requirements, including those which satisfy the United States Army Corps of Engineers and the Regional Water Quality Control Board, will be in place prior to the commencement of construction."

II. Coordination with CDFW

We appreciate OCSD's consideration of impact avoidance to biological resources through incorporation of Mitigation Measure's BIO-1, BIO-2, BIO-3, and HWQ-4. If any additional impacts to the SMCA are anticipated, or if pre-construction surveys identify eelgrass, kelp, or any special-status species, we request that the marine biologist coordinate with CDFW to establish a mitigation plan. As indicated in our 2019 letter, should eelgrass mitigation and transplanting be required, CDFW requires a Scientific Collecting Permit to collect eelgrass, and a Letter of Authorization for eelgrass translocations. CDFW requests to be provided with any pre- and/or post-project survey reports, and draft mitigation and monitoring plans, with an opportunity to comment and collaborate prior to finalization.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the REIR to assist OCSD in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Jessie Lane, Environmental Scientist at (858) 636-3159 or Jessie.Lane@wildlife.ca.gov. For marine species, Marine Protected Areas and eelgrass, please contact Loni Adams, Environmental Scientist at (858) 627-3985 or Loni.Adams@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Erinn Wilson-Olgin
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Erinn Wilson-Olgin
Environmental Program Manager
South Coast Region

ec: Office of Planning and Research, State Clearinghouse, Sacramento
Eric Wilkins, CDFW, Eric.Wilkins@wildlife.ca.gov
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Attachments
A. Draft MMRP (CDFW 2020)

REFERENCES

California Department of Fish and Wildlife, Marine Life Protection Act, https://www.wildlife.ca.gov/Conservation/Marine/MPAs/MLPA, accessed March 19, 2020.

California Department of Fish and Wildlife, Upper Newport Bay State Marine Conservation Area, March 2016.

Michael Baker International, 2019. Bay Bridge Pump Station and Force Mains Replacement Project Draft Recirculated Environmental Impact Report.

National Marine Fisheries Service, 2014. California Eelgrass Mitigation Policy. Accessed September 2020 at https://archive.fisheries.noaa.gov/wcr/publications/habitat/california_eelgrass_mitigation/Final%20CEMP%20October%202014/cemp_oct_2014_final.pdf

Sevrens, G. K. 2016. California Department of Fish and Wildlife. Comments on the Availability of a Draft Recirculated Environmental Impact Report for the Bay Bridge Pump Station and Force Mains Replacement Project, Newport Beach, CA (SCH# 2016111031).

University of California, Davis, 2019. Fish Species by Watersheds: 'Lower San Diego Creek-180702040103'. Accessed September 2020 at http://calfish.ucdavis.edu/location/?ds=698&reportnumber=1293&catcol=4712&categorysearch=%27Lower%20San%20Diego%20Creek%2D180702040103%27

Attachment A:

CDFW Draft Mitigation, Monitoring, and Reporting Plan and Associated Recommendations

Biological Resources			
	Mitigation Measures	**Timing**	**Responsible Party**
MM BIO-1	The "Adjacent Pump Station with Microtunneling" Alternative as analyzed in the REIR shall be selected.	Before Construction	Orange County Sanitation District
MM BIO-2	To minimize significant impacts associated with microtunneling: a. drilling shall halt immediately when a hydrofracture is detected, and hydrofractures shall be cleaned immediately after they occur, if feasible. Necessary response equipment shall be readily accessible and in good working order; b. borehole pressures should be monitored during gall drilling, boring, and reaming activities. The monitor should be independent of and work closely with the drill operator during operations. The drill operator and/or monitors shall have the authority to halt HDD without reprisal; c. all field personnel shall understand their responsibility for timely reporting of hydrofractures; and, d. techniques to reduce potential for hydrofracture and inadvertent returns such as: i. sufficient earth cover for the given substrate should be used to increase resistance to hydrofracture; ii. an adequately dense drilling fluid should be used to avoid travel of drilling fluid in porous sands; iii. the bore should be conducted in a manner that avoids collapse; iv. borehole pressure should be maintained low enough to avoid hydrofracture; v. reaming and pullback rates should be maintained at rates slow enough to avoid over-pressurization of the bore; vi. the surface above the vicinity of the drill head should be visually monitored for surface evidence of hydrofracture; vii. drilling methods should be modified to suit site conditions such that hydrofracture does not occur; and, viii. Non-toxic dyes or markers should be utilized to aid hydrofracture detection.	During Construction	Orange County Sanitation District
MM BIO-3	OCSD will notify for impacts to Newport Bay Channel per Fish & G. Code, section 1600 et seq. All wetland permitting requirements, including those which satisfy the United States Army Corps of Engineers and the Regional Water Quality Control Board, will	Prior to Construction	Orange County Sanitation District

	be in place prior to the commencement of construction.		